


- **3-6.** Use what you have learned about exponents to rewrite each of the expressions below. [Homework Help](#) 

a. $\frac{h^9}{h^{11}}$

b. $x^3 \cdot x^4$

c. $(3k^5)^2$


d. $n^7 \cdot n$

e. $\frac{16x^4y^3}{2x^4}$

f. $4xy^3 \cdot 7x^2y^3$

- **3-7.** Gerardo is simplifying expressions with very large exponents. He arrives at each






of the results below. For each result, decide if he is correct and justify your answer using the meaning of exponents. [Homework Help](#) 

a. $\frac{x^{150}}{x^{50}} \Rightarrow x^3$

b. $y^{20} \cdot y^{41} \Rightarrow y^{61}$

c. $(2m^2n^{15})^3 \Rightarrow 2m^6n^{45}$

- **3-8.** Use what you know about slope and y-intercept to graph $y = -\frac{1}{2}x + 3$. [3-8 HW eTool](#) (Desmos). [Homework Help](#) 
- **3-9.** Write an expression to represent the given situation. Be sure to define your variable.
- Sam currently has \$150 in a savings account and is saving \$10 per week. [Homework Help](#) 
- **3-10.** Find $f(-3)$ for each function below. [Homework Help](#) 

a. $f(x) = -2x + 3$

b. $f(x) = -|1 - x|$

c. $f(x) = \sqrt[3]{9x} + 2$

d. $f(x) = \frac{1}{2}x + 2$

- **3-11.** Simplify each expression. [Homework Help](#) 

. $-\frac{1}{2} + \left(-\frac{1}{5}\right)$

a. $-\frac{2}{3} - 2$

b. $-1\frac{2}{3}(-2)$

c. $-2 + \frac{2}{3}$